

Implementation of search solutions with migration from Solr to Lucidworks Fusion

Overview

Fortune 500 global leader of electrical, industrial, and communications MRO and OEM products, construction materials, and advanced supply chain management and logistics services was looking for setting up Lucidworks Fusion to enable search solution. ISRs across the organization are the users of existing solution and will be shifted to new solution phase wise.

Objective

Client was having issue with handling duplicate documents at query time, incorrect facet counts and requirement to implement advanced search features to improve relevancy as a goal to enhance user experience. Client also wanted to decrease the query response time and convert multiple Solr query to single query from frontend application.

Implementation Approach

NextBrick provided technical services to deliver the search requirements and solve all search related issues. NextBrick designed the search system architecture with hardware recommendation, did the installation of Lucidworks Fusion, Zookeeper & Load Balancer and shared the knowledge with client. Created index and query pipelines to better control the processing of data before ingestion and result before returning to UI. Provided de-duplication feature at query time and handled multiple query in single call. Implemented signals which improves the search result based on user's historical activity. Setup of query and metrics analysis reports. Scheduling of multiple different jobs.

Result

Client got benefit in query response time, which got reduced drastically from 8-10 seconds to 0.1-2 seconds. Reduced multiple queries to single query at frontend with correct facet counts. Better reports of query logs and system metrics analysis. Improved relevancy using industry best practices and signals (User's historical actions) which resulted in better user experience.